10g rapport

Henrik Flindt Nicolas Dyhrman Adrian Joensen

January 2, 2019

Wolf in Moose's Clothing

"A single type of bird can be called a goose, but more is geese, but the plural of moose is not meese, and finally one wolf becomes several wolves. English is like coding. Nobody really know why we do it that way we do, but people on the internet will yell at you for getting it wrong."

-Based on common saying.

1 Manual

fsharpi animalsSmall.fsi animalsSmall.fs animalsSmall.fsx

2 Design

We use Jon's template.

To make the order of animals random, we first look at the wolf list and create a tuple list, where the first element will contain their symbol "w" and the second element will contain the index of the wolves. The same is done to the moose list and finally we will join the two lists and shuffle.

To shuffle the tuple list, we will use a function with a for loop that will pick a random index, remove the element from the tuple list and also put it in a new list. The function should return the new list as the random ordered tuple list. After the list is shuffled, we look through

- 2.1 Two-lists makes a board
- 2.2 Animals
- 2.2.1 Moose
- 2.2.2 Wolf

3 Implementation

```
/// An animal is a base class. It has a position and
    a reproduction counter.
type animal (symb : symbol, repLen : int) =
 let mutable _reproduction = rnd.Next(1,repLen)
 let mutable _pos : position option = None
 let _symbol : symbol = symb
 member this.symbol = _symbol
 member this.position
   with get () = _pos
   and set aPos = _pos <- aPos</pre>
 member this.reproduction = _reproduction
  member this.updateReproduction () =
    _reproduction <- _reproduction - 1
  member this.resetReproduction () =
    _reproduction <- repLen
  override this.ToString () =
    string this.symbol
```

4 White Box Testing

Input	Expected	Result

5 Conclusion